#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018936 Address: 333 Burma Road **Date Inspected:** 01-Dec-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Mr. Xu Le Feng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Tower / OBG

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Baskar Govindarajan, was present during the times noted above for observations relative to the work being performed.

Bay #11

This QA Inspector observed the following work in progress

Tower

Shielded Metal Arc Welding (SMAW)

Weld joint #15, 16 located on West Tower, Lift4, 119 mtr., Skin A, Façade Connection plate WSD1-FASA4. Welder is identified as 202323. ZPMC Quality Control (QC) Inspector is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4314 –TC-P4-2.

Weld joint # 9, 10 located on West Tower, Lift4, 119 mtr., Skin A, Façade Connection plate WSD1-FASA4. Welder is identified as 040690. ZPMC Quality Control (QC) Inspector is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS -B-T-4111.

Weld joint #15, 16 located on West Tower, Lift4, 119 mtr., Skin A, Hand rails L4 –E18A/D -119 mtr. Welder is identified as 067752. ZPMC Quality Control (QC) Inspector is identified as Zhao Chen Sun. The welding

# WELDING INSPECTION REPORT

(Continued Page 2 of 4)

variables recorded by QC appeared to comply with the WPS -B - P - 2112.

Weld joint #17, 18 located on West Tower, Lift4, 119 mtr., Skin A, Hand rails L4 –E18A/D -119 mtr. Welder is identified as 067752. ZPMC Quality Control (QC) Inspector is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2114.

Weld joint #15, 16 located on West Tower, Lift4, 123 mtr., Skin A, Hand rails L4 –E18A/D -123 mtr. Welder is identified as 067752. ZPMC Quality Control (QC) Inspector is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS -B - P - 2112.

Weld joint #17, 18 located on West Tower, Lift4, 123 mtr., Skin A, Hand rails L4 –E18A/D -123 mtr. Welder is identified as 068091. ZPMC Quality Control (QC) Inspector is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2114.

Repair of Weld joint # 6A/B as per Welding repair report no. T -WR -3776, located on Lift 5 Bracket SD1 BRSA5-1. Welder is identified as 044541. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW -2G (2F) – Repair.

Witness of Magnetic Particle Testing (MT)

This QA inspector Witnessed 100% MT performed by ZPMC Quality Control personnel. The member is identified as Tower Skin plate, Lift 6 -Tower Component. The component and weld designation identified as follows:

SSD1 –DPSA6 -5 – Jt. nos -1B, 2B

Bay #10

This QA Inspector observed the following work in progress

Tower

Flux Cored Arc Welding (FCAW)

Weld joint # 1, 2 located on Lift 6 Skin plate to stiffener SSD1-FBSA6 -1. Welder is identified as 040533 / 052075. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2132.

Orthotropic Box Girder (OBG)

Flux Cored Arc Welding (FCAW)

# WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Weld joint # 15 located on Hole plugging of Bike path BK 004A2 -022. Welder is identified as 037840. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS -B - P - 2112 - Plug.

Weld joint # 002, 007 located on Bike path BK 004A6 -034. Welder is identified as 040736. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2332-TC -P4-F.

Weld joint # 002, 007 located on Bike path BK 004A8 -034. Welder is identified as 205649. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2332-TC -P4-F.

For further information see below pictures:-

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





#### **Summary of Conversations:**

No relevent Conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Hu (15002048250), who represents the Office of Structural Materials for your project.

# WELDING INSPECTION REPORT

(Continued Page 4 of 4)

**Inspected By:** Baskar, Govindarajan Quality Assurance Inspector **Reviewed By:** Clifford,William QA Reviewer